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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,362	04/20/2004	William Dudley Currie	DN2001168DO1	4877
7590	12/13/2005		EXAMINER	
Howard M. Cohn Suite 220 21625 Chagrin Blvd. Cleveland, OH 44122			KNABLE, GEOFFREY L	
			ART UNIT	PAPER NUMBER
			1733	

DATE MAILED: 12/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/828,362

Applicant(s)

CURRIE ET AL.

Examiner

Geoffrey L. Knable

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4-20-2004</u> . | 6) <input type="checkbox"/> Other: ____ |

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1. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 8, the phrase "radially movable between the flanges" is awkward and confusing as the movement is not in a direction between the flanges as implied by this language. It is suggested that "between" after "moveable" be changed to for example --guided by-- (note for example the later reference to "guiding" in claim 3) to avoid this ambiguity.

In claim 1, line 9, reference is made to "at least one conical element" whereas at line 14, it is defined that there are "two" conical elements. This inclusion of limitations of two different scopes for the same element within the same claim renders the scope indefinite and confusing.

In claim 1, line 14, it appears that "frustroconical" should be "frustoconical".

In claim 4, reference is made to a "second" plurality of grooves but there was no reference to a "first" plurality (this claim not depending on claim 3), the scope of this claim therefore being indefinite.

In claim 4, line 3, "of a the" is awkward and confusing.

In claim 5, line 3, no antecedent has been established for "the base member", this rendering the scope of this claim indefinite - it seems that this claim was intended to depend from claim 4.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1, 2 and 6-11 are rejected under 35 U.S.C. 102(b) as being anticipated by or Nädler (US 3,418,192).

Nädler discloses a tire building drum including plural radially expandable segments (8), a pair of flanges (2 or 1'), plural ramp elements having tapered faces (25 - note that only half the drum is shown) that engages two frustoconical elements (6), these being configured with their "bases facing each other" (or in other words, with "their apexes (albeit truncated) remote from one another" as noted in the specification). Further, given the converging tapered configuration of the surfaces 25, it would seem reasonable to term these as defining a v-shape. The requirements of claims 2 and 6-8 are also clearly present. As to claim 10, note recess 20 (fig 1) adapted to accommodate the bead cores. Biasing members (10) as required by claim 11 are also taught. As to claim 9, given that the fixed segments are broadly defined by this claim, it is considered that any of the internal relatively fixed parts of the drum (e.g. 2 or 1') read on this as they are between segments if they are within the drum.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-3 and 6-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nädler (US 3,418,192) taken in view of Nojiri et al. (US 5,232,542).

Nädler is applied for substantially the same reasons noted above, it being considered that even if it were considered that the conical surfaces in Nädler did not form a strict "V" shape because of the flattened central area, it is considered obvious to vary the relative length of these engaging tapered/conical surfaces as well as the length of the central flat area (to for example enable forming a tire of smaller width) for only the expected results - note also Nojiri et al., also directed to a drum whose segments are expanded using engaging conical surfaces, which evidences an understanding that these various dimensions can be routinely varied for only the expected results (note esp. col. 5, lines 62+).

As to claim 3, Nädler does not clearly describe the engagement with the flanges/discs 1'/2 and thus does not show grooves as claimed. It however is well known to be suitable and effective and therefore obvious to provide grooved flanges to

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guide similarly operated drum segments to provide radial movement while preventing circumferential movement of the segments - Nojiri et al. is exemplary (e.g. note 25, 26).

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Sawada (US 2003/0051817) also discloses a drum operated by conical surfaces but is not available as prior art.

Trevaskis (US 3,002,875) shows conical surfaces to expand a drum but the drum does not include segments as claimed and the conical surfaces do not have their bases facing each other.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey L. Knable whose telephone number is 571-272-1220. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 571-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Geoffrey L. Knable
Primary Examiner
Art Unit 1733

G. Knable
December 8, 2005